METHODOLOGY FOR COMPUTING THE INDIVIDUAL'S ABILITY TO PAY

APPENDIX A

A. INTRODUCTION

This technical appendix explains the methodology used in the Individual Ability to Pay Model to calculate an individual's or sole proprietorship's ability to fund a contribution toward the cleanup of a Superfund site or pay a penalty for environmental damage. The primary purpose of the appendix is to present the mathematical formulae used in the Individual Ability to Pay Model.

The Individual Ability to Pay Model calculates the ability to pay of an applicant in several stages. First, the model performs a preliminary screening analysis of the applicant's finances in which the model determines whether the applicant could possibly fund any contribution or make any amount of penalty payment. If the model determines that the applicant is a possible source of funds, it instructs the user to conduct a more extensive analysis of the applicant's ability to pay. Once this is complete, the model presents its conclusions regarding both the current financial position of the applicant and the effects a penalty or contribution would have on the applicant's finances. The model investigates two methods by which the applicant could fund a penalty or contribution: cash flow and commercial loans. It also estimates the effects of each payment method on the applicant's income, living expenses, assets, liabilities, and annual debt payments.

B. DERIVATION OF MATHEMATICAL FORMULAE

This section describes the mathematical procedures for calculating ability to pay. The explanation is fairly detailed, including the algorithms used in the Individual Ability to Pay Model. The variables and symbols used in these algorithms are listed and defined in Exhibit A-1. This section outlines the calculations used in each of the model's financial analyses of the applicant -- both

the analyses concerning the applicant's current financial position and those concerning the applicant's ability to fund a penalty or contribution through cash flow and commercial loans. The outline proceeds in the same order as the model's printouts, and addresses the model's calculations as they relate to the following topics:

- Phase 1 Output
- Summary of Applicant's Income Sources
- Applicant's Rated Financial Status
- Two Ability to pay Scenarios

Exhibit A-1				
NOTATION FOR	NOTATION FOR THE INDIVIDUAL ABILITY TO PAY MODEL			
AAGI	Average Adjusted Gross Income (\$)			
ACF	Available Cash Flow (\$)			
ADP	Additional Debt Payments (\$)			
AGI	Adjusted Gross Income (\$)			
CFFC	Cash Flow to Fund Contribution (\$)			
CLIVEXP	Claimed Living Expenses (\$)			
ALLOW	Cash Flow Contingency Allowance (\$)			
CONT	Cash Flow Contingency (%)			
DPPI	Debt Payments as a Percentage of Income (%)			
FUNDS	Amount Needed to Fund Entire Contribution (\$)			
LOAN	Five Year Supportable Loan with Additional Debt Payment (\$)			
MHI	Median Household Income (\$)			
n	Number of Years			
NW	Net Worth (\$)			
PMT	Contribution Individual Can Pay to EPA (\$)			
PVCF	Present Value of Cash Flow (\$)			
r	Interest Rate on Loans (%)			
smooth	Smoothing Constant			
S _{xi}	Standard Error			
$t_{lpha/2}$	= 1.886; Value for T-distribution, assuming 2-tailed test, 80 percent			
	significance level, and 2 degrees of freedom			
TA	Total Assets (\$)			
TAI	Total Average Income (\$)			
TADP	Total Annual Debt Payments (\$)			
TI_{i}	Total Income in year i (\$)			
TL	Total Liabilities (\$)			
TLIVEXP	Total Living Expenses (\$)			
$\mathbf{X}_{\mathrm{i,j}}$	Income in Year i from Source j (\$)			
$\overline{\mathbf{x}}$	Unweighted Average Income (\$)			
weight _i	Income Weight for Year i Determined by Smoothing Constant			

Note: Within the appendix the subscripts a and b may be attached to the variables listed above. Subscript a pertains to the "after" case (i.e., the applicant's financial position after funding a penalty or contribution); subscript b pertains to the "before" case.

1. Phase 1 -- Income Comparison

In Phase 1, the model calculates the average adjusted gross income of the applicant from the tax information supplied by the user; it then compares this income level to the low income level for the county of residence and household size of the applicant. If the applicant's income is above the low-income level (or any flags concerning the applicant's information are issued,) the model prompts the user for a Phase 2 analysis.

In order to calculate the average adjusted gross income (AAGI) for the applicant, the model weights the applicant's adjusted gross income (AGI) for each of the years for which it is available according to the smoothing constant, which is pre-set to 0.3. By using a smoothing constant, the model assumes that the most recent year's income provides the best indication of the applicant's current financial position. This same assumption is applied in the corporate ability to pay model (ABEL) for income analysis. The calculations proceed as follows:

$$AAGI = \sum_{i=1}^{n} (AGI_i * weight_i)$$

$$where weight_i = \frac{[smooth * (1 - smooth)^{i-1}]}{\sum_{i=1}^{n} [smooth * (1 - smooth)^{i-1}]}$$

Inserting the default smoothing constant into the equation presented above generates the weights the model uses to calculate the applicant's average adjusted gross income. These weights are presented in Exhibit A-2.

Exhibit A-2			
DEFAULT INCOME WEIGHTS (based on a smoothing constant of 0.3)			
Year (1 = most recent)	3 Years of Data	2 Years of Data	1 Year of Data
1	.46	.59	1
2	.32	.41	
3	.22		

In Phase 1, the model does not allow the user to adjust the smoothing constant; however, in Phase 2 the model may prompt the user to make such adjustments. These options will be described in more detail in Section 2 of this appendix.

After finding the applicant's average adjusted gross income, the model compares it to the low income level for the applicant's county of residence and household size, as reported annually in the Adjusted Income Limits published by the U.S. Department of Housing and Urban Development. These income limits are updated annually by EPA. If the applicant's average adjusted gross income exceeds the low income threshold, or if the applicant has complex personal finances, the model recommends proceeding to a Phase 2 analysis.

2. Phase 2 -- Summary of Applicant's Income Sources

In Phase 2, the model calculates the applicant's total weighted average income. To do so, the model examines seven potential income sources for each year in the analysis. These sources include:

- 1. Wages and salaries;
- 2. Interest and dividends;
- 3. Capital gains/losses;
- 4. Retirement-related;
- 5. Business;
- 6. Farm; and
- 7. Other.

Total income for each year (TI_i) is calculated by summing the seven income categories. The resultant sums are then averaged via the smoothing constant to determine total weighted average income (TAI).

A.2

$$TAI = \sum_{i=1}^{n} (TI_i * weight_i)$$

where weight, is determined by smoothing constant equation A.1

Next, replacing TI in equation A.2 with $x_{i,j}$ (income in year i from source j), the model calculates weighted averages for each of the seven income categories. The model also calculates the percentage of total income that each category comprises. To do so, the model determines, for year i, the percent of total income accounted for by each source (percent $x_{i,j}$). Specifically:

A.3

Percent
$$x_{i,j} = \frac{x_{i,j}}{TI_i}$$

Finally, it calculates a weighted average of the percentages of income for each source over all years provided, by simply using percentage income rather than total income in equation A.2. Since the model has a default smoothing constant of 0.3, the weights assigned to each year's total income, income source, or percentage are the same as those given for calculating average adjusted gross income in Phase 1. The applicable weights are shown in Exhibit A-2.

Income Variation Test

In Phase 2 the model determines whether total income in any year is significantly different from total average income (unweighted). If there is a significant difference, the model issues a flag prompting the user to check his or her data inputs. If the inputs are accurate, the user may decide to alter the smoothing constant.

For a case with three years of data, the model uses a two-part test to determine whether any year's total income is significantly different from average income (unweighted). First the model determines whether any year's total income falls outside the 80 percent confidence interval around the mean, as follows:

$$\overline{x}$$
 - $t_{\alpha/2}$ * $s_{\overline{x}}$ < where $<$ \overline{x} + $t_{\alpha/2}$ * $s_{\overline{x}}$

$$\overline{x} = \frac{\sum_{i=1}^{n} TI_{i}}{n}$$

 $t_{\alpha/2} = 1.886$ (t distribution, degrees of freedom = 2, 80% confidence)

$$s_{\overline{x}} = \sqrt{\frac{\sum_{i=1}^{n} (TI_i - \overline{x})^2}{(n-1)*n}}$$

If any of the income figures lie outside the interval, the model proceeds to the second part of the test. It determines whether income for each year is more than 20 percent different from the unweighted average, using the following equation:

A.5

$$|\overline{x} - TI_i| \geq \overline{x} * .2$$

If income for any year lies outside the 80 percent confidence interval and is also more than 20 percent different from average income, the model issues a flag. The flag alerts the user that total income in one or more years is significantly different from total mean income. When this flag appears, the user may want to modify the smoothing constant. Information on changing the smoothing constant and the impacts of such a change are discussed in Chapter 4 of this manual and in the model's on-line help system. As noted in Chapter 4, increasing the smoothing constant weights the most recent year's income more heavily; decreasing the constant lowers the weight given to the most recent year's income, simultaneously raising the weights given to other years. For a case with three years of data, the weights applied by the model for various smoothing constants are shown in Exhibit A-3.

Exhibit A-3 INCOME WEIGHTS FOR THREE YEARS OF DATA				
Year (1 = most recent)	Smooth = 0.7	Smooth = 0.5	Smooth = 0.3	Smooth = 0.1
1	.72	.57	.46	.37
2	.22	.29	.32	.33
3	.06	.14	.22	.30

Note that the confidence interval methodology is applied only in cases that contain three years of income data. When only two years of data are available, the model uses only the second part of the test, and determines whether income in either year is more than 20 percent different from unweighted average income, as shown in Equation A.5. If so, the model issues a flag.

3. Phase 2 -- Applicant's Rated Financial Status

The model's analysis of the applicant's current financial status is divided into four parts. These include the applicant's:

- Income Ranking;
- Available Cash Flow;
- Net Worth; and
- Debt Capacity.

a. Income Ranking

The model ranks the applicant's income relative to the median income for the applicant's county of residence and household size. In this calculation, the model divides the applicant's total average income, calculated previously in Equation A.2, by the median household income for the county of residence and household size of the applicant. The model then multiplies the result by 100 to obtain the rank in percentage form.

A.6

Income Rank (percentage) =
$$\left(\frac{TAI}{MHI}\right) * 100$$

b. Available Cash Flow

To obtain the applicant's available cash flow (ACF), the model uses the applicant's total average income and total claimed living expenses (CLIVEXP). The model sums the applicant's living expenses, input by the user from the financial data request form and then multiplies these claimed living expenses by the cash flow contingency. The determination of the appropriate contingency is made by the income ranking (previously calculated); for each of three categories of income ranks, the model applies a different contingency to living expenses, as shown in Exhibit A-4. The specific contingency values used by the model are based upon professional judgment.

Exhibit A-4 CASH FLOW CONTINGENCY SCHEDULE			
Income Rank	Low Less than 75% of MHI	Medium 75% to 125% of MHI	High Greater than 125% of MHI
Contingency Allowance	15%	10%	5%

The model multiplies the applicant's claimed expenses by the appropriate percentage to obtain the cash flow contingency allowance (ALLOW). It then adds the allowance to expenses to obtain the applicant's total living expenses. Finally, it subtracts these total living expenses from total average income to arrive at available cash flow. The calculation is as follows:

A.7
$$ACF = TAI - (CLIVEXP + ALLOW)$$
$$where ALLOW = CONT * CLIVEXP$$

c. Net Worth

To obtain the applicant's net worth, the model uses the applicant's total assets (TA) and total liabilities (TL). First, the model sums the applicant's assets and liabilities, input by the user from the financial data request form. Then, the model subtracts total liabilities from total assets to obtain net worth (NW). The calculation is as follows:

$$NW = TA - TL$$

d. Assessment of Debt Capacity

To obtain the applicant's annual debt payments as a percentage of income (DPPI), the model uses the applicant's total average income (as calculated in equation A.2) and the applicant's total annual debt payments (TADP). First, the model sums the applicant's annual debt payments, as input by the user from the financial data request form. Then, it divides annual debt payments by total average income, multiplies by 100, and arrives at the applicant's debt payments as a percentage of income.

$$DPPI = \left(\frac{TADP}{TAI}\right) * 100$$

4. Scenario 1: Ability to Pay from Cash Flow

Scenario 1 examines the applicant's ability to fund a penalty or contribution from cash flow. The model defines cash flow as total average income (TAI) less total living expenses (TLIVEXP). It assumes that the applicant's excess cash flow for the next five years is available for a penalty or contribution. The model further assumes that the applicant will obtain a loan and make a lump-sum payment to the government. Consequently, the maximum contribution an applicant can make from cash flow is equal to the present value of five years of cash flow less interest payments and a "safety net" contingency allowance. If the applicant's total average income is too low (or living expenses are too high) to fund the entire penalty or contribution sought by EPA in this manner, the model concludes that the applicant cannot afford the entire amount, and instead calculates the maximum contribution the applicant can afford through five years of cash flow.

To determine whether the applicant can afford the penalty or contribution sought by EPA, the model first calculates the present value of five years of the applicant's available cash flow (PVCF), as follows:

A.10
$$PVCF = \left(\frac{ACF}{r}\right) * \left[1 - \frac{1}{(1+r)^n}\right] \text{ where } n = 1,2,3,4,5$$

Then the model calculates the funds necessary to pay the penalty or contribution (FUNDS).

$$FUNDS = (contribution) * (1 + CONT)$$

The model compares this value to the present value of five years' cash flow -- if the present value of cash flows is greater than or equal to the amount necessary to fund the penalty or contribution, the model concludes that the applicant can afford to fund the entire amount. If, however, the amount necessary to fund the contribution is greater than available cash flows, the model determines that the applicant cannot afford the entire amount and finds the portion which the applicant can pay. Both of these outcomes are described below.

If the applicant's cash flow is negative (i.e. total living expenses exceed total average income) the model will not perform an ability to pay calculation for the applicant in Scenario 1. The model assumes that the applicant cannot fund any amount from cash flow. In this case, the before/after evaluations will be identical on the output screens, and a flag will alert the user that the applicant cannot finance a penalty or contribution through cash flow.

a. Model Conclusion When the Applicant Can Afford Contribution

In the case in which the applicant can afford the penalty or contribution, the model uses the cash flow which will be necessary to fund the entire contribution (including contingency), as calculated above, to find the annual payment required to finance that amount (CFFC):

CFFC =
$$\frac{(FUNDS * r)}{\left[1 - \frac{1}{(1+r)^n}\right]}$$
 where $n = 1, 2, 3, 4, 5$

Then the model finds the contingency allowance by simply subtracting the penalty or contribution sought by EPA from the funds necessary to pay it. This contingency, along with the contribution, constitutes the applicant's new expense.

b. Model Conclusion When the Applicant Cannot Afford Contribution

If the penalty or contribution input by the user is greater than the applicant can afford with five years of cash flow, or the user has entered a value of zero for the contribution, the model calculates the maximum amount the applicant can pay through cash flow (PMT), as follows:

$$PMT = \frac{PVCF}{(1 + CONT)}$$

Finally, the model calculates the portion of the applicant's cash flows that are constituted by the "safety net" contingency allowance by subtracting the penalty or contribution paid to EPA from the present value of five years of cash flows.

c. Before/After Evaluations

The model calculates the financial impact on the applicant of funding the penalty or contribution from cash flow. To do so, the model presents "before" and "after" summaries that show the impact of funding the contribution on the applicant's living expenses, available cash flow, liabilities, net worth, and annual debt payments. These calculations are summarized in Exhibit A-5.

First, the model calculates the applicant's new level of living expenses (TLIVEXP) after the contribution is made; this amounts to the annual cash flow set aside to fund the contribution (ACF or CFFC, depending on whether the applicant can or cannot afford the entire contribution) added to the old level of living expenses.

Then the model calculates the new level of available cash flow by subtracting the new level of total living expenses from the unchanged level of total average income. In the case in which the applicant cannot afford the penalty or contribution (or the contribution entered by the user is zero) the new level of available cash flow will always be zero, since the model removes from the user all available cash to fund the maximum contribution possible.

Next, the model calculates the new level of total liabilities after the penalty or contribution has been funded. To do so, it adds the amount of the contribution the applicant can afford (PMT) to the old level of total liabilities. (When the applicant can afford the entire contribution, PMT = the contribution sought by EPA.) The model then subtracts this new level of total liabilities from the unchanged level of total assets to arrive at the new level of net worth.

A.15
$$NW_a = TA - TL_a$$

$$where TL_a = TL_b + PMT$$

Note that if the contribution funded by the applicant through cash flow causes his or her net worth to become negative in the "after" case, the model will issue a flag in Phase 2 Output alerting the user to this situation.

Finally, the model calculates the new amount of debt payments as a percentage of income. To do so, the model first finds the level of additional debt payment required to support the contribution. This amount is the portion of the applicant's annual cash flow required to fund the contribution alone, without the contingency, and is calculated as follows:

A.16
$$ADP = \frac{PMT * r}{\left[1 - \frac{1}{(1+r)^n}\right]} \text{ where } n = 1,2,3,4,5$$

The model adds the old level of total annual debt payments to this additional debt payment to get the new level of total annual debt payments. It then divides this amount by the unchanged level of total average income, and multiplies the result by 100, to arrive at the new level of debt payments as a percentage of income. The calculation is as follows:

$$DPPI_{a} = \frac{TADP_{b} + ADP}{TAI} * 100$$

Note that if the contribution funded by the applicant through cash flow causes debt payments as a percentage of income to exceed 36 percent in the "after" case, the model will issue a flag in Phase 2 Output alerting the user to this situation.

Exhibit A-5 displays the algorithms used in Scenario 1, formatted as in the model's printouts.

Exhibit A-5

EQUATION REFERENCES

SCENARIO 1: CASH FLOW

	Can Afford	Can't Afford
1. Contribution Sought by EPA	User defined	User defined
2. Cash Flow to Fund Contribution	EQ A.12	ACF
3. Loan Rate for 5 Year Unsecured Loan	Default	Default
4. Present Value of 5 Years' Cash Flow	EQ A.11	EQ A.10
5. Contingency Allowance	EQ A.13	line 4 - line 6
6. Contribution Individual Can Pay to EPA	Contrib. sought by EPA	EQ A.14

	Before <u>Contribution</u>	After <u>Contribution</u>
7. Total Average Income	EQ A.2	EQ A.2
8. Total Living Expenses	CLIVEXP + ALLOW	line 8 _{before} + ACF or CFFC
9. Available Cash Flow	EQ A.7 (line 7 - line 8)	line 7 - line 8
10. Total Assets	FDR ¹	FDR
11. Total Liabilities	FDR	EQ A.15
12. Net Worth	EQ A.8 (line 10 - line 11)	EQ A.15
13. Total Average Income	EQ A.2	EQ A.2
14. Total Annual Debt Payments	FDR	EQ A.16 + line 14 _{before}
15. Debt Payment as a Percentage of Income	EQ A.9 (line 14/line 13) * 100	EQ A.17

FDR = Obtained directly from the financial data request form.

5. Scenario 2 -- Ability to Pay from Loan from Commercial Lenders

In Scenario 2, the model determines the applicant's ability to pay from loans from commercial lenders. To do so, the model uses the applicant's current debt payments as a percentage of income to see whether the applicant can pay the entire penalty or contribution by taking on additional debt payments. The model uses 36 percent as an approximation of the upper bound which debt payments as a percentage of income may reach. Thus, it determines how much additional debt the applicant can assume by multiplying the applicant's total average income by 36 percent and subtracting the amount of current total annual debt payments from that, as follows:

$$ADP = (TAI * .36) - TADP_b$$

Then the model calculates the present value of that amount for five years to obtain the maximum amount the applicant can fund toward the penalty or contribution. This represents the maximum commercial loan the applicant can secure in support of the proposed contribution.

A.19

$$LOAN = \left(\frac{ADP}{r}\right) * \left[1 - \frac{1}{(1+r)^n}\right] \text{ where } n = 1,2,3,4.5$$

The model compares this value to the proposed contribution -- if the amount able to be funded by the applicant is greater than or equal to the contribution, the model determines that the applicant is able to pay. If not, the applicant is deemed unable to fund the entire penalty or contribution from loans from commercial lenders alone.

If the applicant's debt payments already exceed 36 percent of his income, the model will not perform an ability to pay calculation for the applicant in Scenario 2. The model assumes that the applicant cannot fund any amount from commercial loans. In this case, the before/after evaluations of finances will be identical on the output screens, and a flag will alert the user that the applicant cannot finance a penalty or contribution through this method.

a. Model Conclusion When the Applicant Can Afford Contribution

In the case in which the amount of a five-year loan which the applicant can finance is greater than the contribution required, the model concludes that the applicant can afford the entire penalty or contribution. The model proceeds by first equating the contribution sought by EPA (input by the user in the "Case Description Details" screen) with the five-year supportable loan with additional

debt payments (LOAN). Then the model calculates the additional debt payments (ADP) which must be used to take a five year loan in that amount with the following equation:

A.20
$$ADP = \frac{LOAN * r}{\left[1 - \frac{1}{(1+r)^n}\right]} \text{ where } n = 1,2,3,4.5$$

The model adds the previous level of total annual debt payments to these additional debt payments to arrive at the new (post-contribution) figure for total annual debt payments.

b. Model Conclusion When the Applicant Cannot Afford Contribution

In the case in which the amount of a five-year loan which the applicant can finance is less than the penalty or contribution sought by EPA, or the user has input zero for the amount of contribution, the model judges that the applicant cannot afford the contribution. Thus, it computes the maximum amount that the applicant can fund. To do so, the model proceeds in the same way as it did in determining whether the applicant could afford the contribution; it calculates the level of total annual debt payments that equal 36 percent of total average income (see equation A.18 above). From this total, it subtracts the current level of total annual debt payments to arrive at the maximum level of additional debt payments the applicant can afford.

This maximum level of additional debt payments tells the user how much, annually, the applicant can afford to pay on a loan. The model then calculates the five-year loan that can be funded from payments of this amount by taking the present value of five years of this payment, discounted at the interest rate (r) (see equation A.19 above).

This present value equals the amount of the penalty or contribution that can be funded through a five-year loan, and is the maximum the applicant can afford.

c. Before/After Evaluation

The model calculates the financial impact on the applicant of funding the contribution from loans. To do so, the model presents "before" and "after" summaries that show the impact of funding the contribution on the applicant's living expenses, available cash flow, liabilities, net worth, and annual debt payments. These calculations are summarized in Exhibit A-6. In Scenario 2, the before/after evaluation of the effects of the loan on the applicant's income and debt status are the same whether the applicant can or cannot fund the entire contribution.

First, the model finds the new level of total living expenses by adding the additional debt payments, multiplied by $(1 + \cosh flow contingency)$, to the old level of total living expenses, as follows:

A.21
$$TLIVEXP_a = TLIVEXP_b + ADP(1 + CONT)$$

Then the model subtracts the new level of total living expenses from the unchanged level of total average income to obtain available cash flow after the contribution.

Note that if the contribution funded by the applicant through loans from commercial lenders causes available cash flow to become negative in the "after" case, the model will issue a flag in Phase 2 Output alerting the user to this situation.

Next, the model obtains the new level of total liabilities by adding the five-year supportable loan with additional debt payments (i.e. the amount of the penalty or contribution that can be funded by the applicant) to the old level of total liabilities. The model then subtracts this new level of total liabilities from the unchanged level of total assets to obtain the new level of net worth.

$$NW_a = TA - TL_a$$

$$where \ TL_a = TL_b + LOAN$$

Note that if the contribution funded by the applicant through loans from commercial lenders causes net worth to become negative in the "after" case, the model will issue a flag in Phase 2 Output alerting the user to this situation.

Finally, the model obtains the debt payments as a percentage of income by adding the additional debt payments to the old level of total annual debt payments, dividing this sum by the unchanged level of total average income, and multiplying by 100, as follows:

$$DPPI_a = \frac{TADP_b + ADP}{TAI} * 100$$

Exhibit A-6 displays the algorithms used in Scenario 2, formatted as in the model's printouts.

Exhibit A-6

EQUATION REFERENCES

SCENARIO 2: COMMERCIAL LOANS

	Can Afford	Can't Afford
1. Contribution Sought by EPA	User defined	User defined
2. Current Debt Payments	FDR ¹	FDR
3. Additional Debt Payment	EQ A.20	EQ A.18
4. Total Annual Debt Payments	line 2 + line 3	line 2 + line 3
5. 5 Year Supportable Loan with Additional Debt Payment	Contrib. sought by EPA	EQ A.19

	Before Contribution	<u>After</u> Contribution
6. Total Average Income	EQ A.2	EQ A.2
7. Total Living Expenses	CLIVEXP + ALLOW	EQ A.21
8. Available Cash Flow	EQ A.7 (line 6 - line 7)	line 6 - line 7
9. Total Assets	FDR	FDR
10. Total Liabilities	FDR	EQ A.22
11. Net Worth	EQ A.8 (line 9 - line 10)	EQ A.22
12. Total Average Income	EQ A.2	EQ A.2
13. Total Annual Debt Payments	FDR	ADP + line 13 _{before}
14. Debt Payment as a Percentage of Income	EQ A.9 (line 13/line 12) * 100	EQ A.23

FDR = Obtained directly from the financial data request form.